



Science

American Thyroid Association Guidelines:

<http://online.liebertpub.com/doi/pdfplus/10.1089/thy.2015.0020>

I-131 Ablation and thyroid cancer:

<https://www.aace.com/syllabus/tampa-thyroid-cancer/presentations/8-WARTOFSKY-AACE-Thyroid-Cancer-january-2015.pdf>

https://www.ucl.ac.uk/news/news-articles/May2012/03052012_HiLo_Trial_thyroid_cancer

<http://www.ncbi.nlm.nih.gov/m/pubmed/22551128/>

https://ec.europa.eu/energy/sites/ener/files/documents/097_en.pdf (excretion curves)

<http://jnm.snmjournals.org/content/33/12/2196.full.pdf> (I-123 no isolation)

<http://online.liebertpub.com/doi/abs/10.1089/thy.2016.0246#/doi/abs/10.1089/thy.2016.0246> (Hurthle Cell Carcinoma)

<http://www.ncbi.nlm.nih.gov/books/NBK100835/>

<http://www.bmj.com/content/354/bmj.i3839>

<http://www.nrc.gov/about-nrc/radiation/around-us/doses-daily-lives.html> (background radiation levels)

Low Iodine Diet:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2956383/>

<http://www.ncbi.nlm.nih.gov/pubmed/15009915>

<http://online.liebertpub.com/doi/abs/10.1089/thy.2010.0232>

<http://www.ncbi.nlm.nih.gov/pubmed/12641625>

<https://drive.google.com/file/d/0By4naMULG2PCUONQeE1yYWR0TkE/view?pref=2&pli=1>

Controversies about cranberries and strawberries iodine content comes from non-scientific web pages. For example, the Bembu website says these fruits (and many other foods) have high iodine levels, but there are no citations. This site is not based on science. <http://www.whfoods.com/genpage.php?tname=foodspice&dbid=145>

Controversies about potato skins and meat: Neither the NIH, ATA, nor one of the founders of LID have found that these items contribute to iodine levels. Potato skins and meat do not concentrate iodine, as evidenced by the lack of scientific evidence and urine analysis for iodine by Dr. Ain.



Milk iodine levels:

A few LIDs (minority and not supported by us) allow small amounts of milk, such as 100 ml (1/2 cup of milk).

Science - The breasts concentrate iodine because it's a required nutrient for babies. This results in all mammal milk being full of iodine. It's also why women that are still leaking after discontinuing breast feeding should not do RAI, as her breasts will concentrate the iodine from the RAI.

National Institutes of Health iodine levels in milk available at - <https://ods.od.nih.gov/factsheets/Iodine-HealthProfessional/>

1 cup of milk equals 236 mls. There are 56 mcg of iodine in 1 cup of reduced fat milk. 100 mls of reduced fat milk has 23.72 mcg of iodine. That is a LOT of iodine when our daily iodine limit is 50 mcg, and 1/2 cup of milk is half of your daily allowance of iodine.

The low iodine diet has less than 50 micrograms of iodine per day. Off the diet, the normal recommended daily allowance for iodine is 150 micrograms.

Iodine in Sea Salt

<http://www.ncbi.nlm.nih.gov/m/pubmed/12012191/>



1 teaspoon of table salt = 5.69 grams, 50 ug of iodine in sea salt <1/8 teaspoons.

Himalayan salt - <http://www.livestrong.com/article/534033-what-are-the-84-minerals-in-himalayan-salt/#page=2>

<http://themeadow.com/pages/minerals-in-himalayan-pink-salt-spectral-analysis>



FDA and Iodized salt:

<http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=100.155>

<http://www.inspection.gc.ca/food/labelling/food-labelling-for-industry/salt/eng/1391790253201/1391795959629?chap=0>

Iodine in Used in Commercial Cleaning and Sanitation:

Iodine is not used as much as a sanitizer as chlorine or high water/steam temperature for the following reasons -

- 1) not as effective at sanitizing as chlorine. Chlorine is the best broad-spectrum microbiological agent.
- 2) Iodine is more expensive than chlorine. Chlorine is much less expensive because it can be mixed with bleach. Cheap Cheap
- 3) iodine leaves stains on cutting boards & plastic. Not wanted. Chlorine with bleach does not do this
- 4) the best and simplest method to sanitize is use hot water/steam over 171 F.

<https://www3.epa.gov/ttnchie1/ap42/ch09/final/c9s08-1.pdf>

5) USDA response to iodine in cans (manufacturing food plant):

USDA Response:

In response to your question, iodine is not generally used for cleaning or sanitizing food processing equipment. There is no cleaning compound for food equipment containing iodine that can be used without a potable water rinse to remove all traces of the compound. Therefore, iodine from processing equipment cleaners will not contribute to dietary iodine intake.

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<https://www.inspire.com/groups/thyca-thyroid-cancer-survivors-association/discussion/iodine-for-cleaning-question-to-the-usda-for-lid-consideration/>

6) There is one place that iodine solution may be used (if they aren't using high water temp and high pressure). Bars may clean glasses with it because it doesn't leave a taste behind. If you are going to the bar for a drink, ask how they clean their glassware.

<http://www.hi-tm.com/1908/SECTION-3-B-1908.pdf>



Non-dietary Iodine contributors that can cause a large increase in iodine levels-

1) Dehydration - it can cause a false reading of high iodine content in urine because the sample is now concentrated. If your urine is not light yellow, drink up before urine iodine testing.

2) Vitamins (prenatal, labelled content per daily serving): 75–200 µg

3) Amiodarone (per 200 mg): 75,000 µg in 1 pill

*heart arrhythmia medications (Brands: Cordarone, Nexterone, and Pacerone)

4) Iodinated contrast (free iodine content, per CT scan): 13,500 µg

5) Transdermal Iodine Absorption - Topical iodine (povidone iodine): variable, usually 1–5%

*betadine - Each 1 mL contains 100 mg povidone-iodine, equivalent to 10 mg available

iodine. <http://www.ncbi.nlm.nih.gov/m/pubmed/16029128/>

6) Supplements of Saturated solution of potassium iodide (per drop): 50,000 µg

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3976240/...](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3976240/)

<http://www.ncbi.nlm.nih.gov/m/pubmed/16029128/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3637997/>

Distilled water health concerns:

http://www.who.int/water_sanitation_health/dwg/nutrientschap12.pdf

http://apps.who.int/iris/bitstream/10665/43836/1/9789241563550_eng.pdf

Water softener concerns:

Thank you for contacting Morton Salt, and for your interest in our products. Morton® Water Softening products are not iodized.

We hope you find this information helpful. Should you have additional questions or comments, feel free to contact us via our toll-free number [\(800\) 725-8847](tel:8007258847), Monday through Friday 8:30 a.m. - 4:30 p.m. CST, or via our website at www.mortonsalt.com. Again, thank you for contacting Morton Salt.



Soy:

Soybean oil and soy lecithin:

1) soy oil and soy lecithin are both okay. Thyca.org <http://www.thyca.org/pap-fol/lowiodinediet/>

2) The founder of the Low Iodine Diet:

As Dr. Kenneth Ain explains in the book's Introduction: "Soy lecithin is extracted from soy oil, rather than the protein parts, and has just trace amounts of soy proteins (only enough to bother people with soy allergies). Soy oil, in reasonable amounts (usually as part of a vegetable oil mixture or a minor ingredient) won't add any discernible iodine to the diet and is not goitrogenic. There is no reason to think that soy lecithin is in any way unsafe for the LID. The major reason for misconceptions regarding lecithin and iodine has to do with the term "iodine number." This is an organic chemistry term meaning "a number expressing the percentage of iodine absorbed by a substance; performed as a measure of the proportion of unsaturated linkages present and usually determined in the analysis of oils and fats." The "iodine number" has nothing to do with content of iodine and is merely a laboratory test used when analyzing lecithin. So, don't worry if the label of your food item lists lecithin."

http://yourhealthpress.com/book_lidcookbook.shtml11

3) Soy oil do not contain isoflavones (these are genistein and daidzein that block TPO).

http://extension.agron.iastate.edu/soybean/uses_isoflavones.htm

4) Other sources: about soy oil/soy lecithin not containing the soy protein:

http://www.hopkinsmedicine.org/healthlibrary/conditions/allergy_and_asthma/soy_allergy_diet_85,P00036/

<http://goaskalice.columbia.edu/answered-questions/it-safe-me-eat-soy-foods-if-i-have-hypothyroidism>

<http://naldc.nal.usda.gov/download/26685/PDF> (composition of soy lecithin)

Sours for RAI: no earlier than 24 hours after RAI.

<http://www.thyroid.org/patient-thyroid-information/ct-for-patients/vol-3-issue-9/vol-3-issue-9-p-7-8/>

[http://download.springer.com/static/pdf/184/art%253A10.1186%252Fs40658-014-](http://download.springer.com/static/pdf/184/art%253A10.1186%252Fs40658-014-0100-)

[1.pdf?originUrl=http%3A%2F%2Ffejnmmiphys.springeropen.com%2Farticle%2F10.1186%252Fs40658-014-0100-](http://download.springer.com/static/pdf/184/art%253A10.1186%252Fs40658-014-0100-)

[1&token2=exp=1473015174~acl=%2Fstatic%2Fpdf%2F184%2Fart%25253A10.1186%25252Fs40658-014-0100-](http://download.springer.com/static/pdf/184/art%253A10.1186%252Fs40658-014-0100-)

[1.pdf*~hmac=6ffa551ea40ec8d537a604a10bf23500e579c502fdac414fefcb9601dede8f4](http://download.springer.com/static/pdf/184/art%253A10.1186%252Fs40658-014-0100-)

<http://www.ncbi.nlm.nih.gov/m/pubmed/15695785/>



Pets and Sugar free sweeteners:

<http://www.aspcapro.org/sites/pro/files/xylitol.pdf>

<http://www.vcahospitals.com/main/pet-health-information/article/animal-health/xylitol-toxicity-in-dogs/4340>

<http://www.preventivevet.com/dogs/xylitol-sugar-free-sweetener-dangerous-for-dogs>

<http://www.wsj.com/articles/sweetener-in-gum-is-causing-surge-in-accidental-dog-poisonings-1446512402>

Pets and RAI: RAI treatment dose for cats is <2 mci's

<http://jama.jamanetwork.com/article.aspx?articleid=192644>

<http://www.animalendocrine.info/2013/04/estimating-radioiodine-dose-to.html>

<http://animalimaging.net/radioactive-iodine-therapy>

RAI and breastfeeding:

<http://www.thyca.org/download/document/184/ataradiation.pdf>

RAI and breast cancer risk:

<http://www.clinicalendocrinologynews.com/specialty-focus/pituitary-thyroid-adrenal-disorders/single-article-page/rai-given-to-thyroid-ca-patients-does-not-increase-their-breast-malignancy-occurrence-recurrence/774fde7ca70543e51529e438d16321c0.html>

<http://www.ncbi.nlm.nih.gov/m/pubmed/26147607/>

Cancer Incidence with RAI or thyroidectomy:

<http://press.endocrine.org/doi/abs/10.1210/jc.2015-1874?journalCode=jcem>

<http://m.jnci.oxfordjournals.org/content/108/2/djv314.abstract?sid=a5c8c225-d155-4934-b625-89698580e1f2>

OTHER:

Driving Off Thyroid Medications:

<https://www.endocrine.org/news-room/press-release-archives/2014/hypothyroidism-may-lead-to-impaired-driving>

<https://www.ncbi.nlm.nih.gov/m/pubmed/25381990/> or

<https://www.thyroidcancer.ca/userfiles/files/Ain%202015%20Driving%20Study.pdf>

<http://www.thyroidcancerdoctor.com/help.html>



4/12/17

TSH Suppression:

<http://www.thyroid.org/patient-thyroid-information/ct-for-patients/vol-3-issue-9/vol-3-issue-9-p-11-12/>

http://m.globalrph.com/?url=http%3A%2F%2Fwww.globalrph.com%2Fthyroid_calc.htm&utm_referrer#2996

<http://www.ncbi.nlm.nih.gov/m/pubmed/26700485/>

Cancer Myths:

<http://scienceblog.cancerresearchuk.org/2014/03/24/dont-believe-the-hype-10-persistent-cancer-myths-debunked/>

<http://www.mayoclinic.org/diseases-conditions/cancer/in-depth/cancer-causes/art-20044714?pg=2>

<http://www.cancer.gov/about-cancer/causes-prevention/risk/myths>

The LID Life
Community